Date: Tue, 14 Sep 93 04:30:29 PDT
From: Ham-Digital Mailing List and Newsgroup <ham-digital@ucsd.edu>
Errors-To: Ham-Digital-Errors@UCSD.Edu
Reply-To: Ham-Digital@UCSD.Edu
Precedence: Bulk
Subject: Ham-Digital Digest V93 #39
To: Ham-Digital

Ham-Digital Digest Tue, 14 Sep 93 Volume 93 : Issue 39

Today's Topics:

Send Replies or notes for publication to: <Ham-Digital@UCSD.Edu>
Send subscription requests to: <Ham-Digital-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Ham-Digital Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/ham-digital".

Date: 13 Sep 93 14:30:39 GMT
From: ogicse!emory!kd4nc!ke4zv!gary@network.ucsd.edu
Subject: Digipeater
To: ham-digital@ucsd.edu

In article <1993Sep13.031728.22916@uxmail.ust.hk> ee_hflo@uxmail.ust.hk (ee_help) writes:
> How a digipeater work ? Is it same as a repeater ?

A digipeater is a store and forward relay node. Unlike common repeaters, it does not retransmit what it hears until it has received the entire frame, validated it, and determined that the frame is requesting the particular node to retransmit it now. This information is in the AX25 header of each frame.

Amateur digipeaters normally operate in simplex mode on a single frequency, alternately listening and transmitting, though they can be used on split frequencies. Repeaters normally operate on two separate frequencies in the same band, or crossband, and repeat in

realtime, or near realtime, everything they hear on the input channel
to the output channel. They may or may not use bit regeneration, but
they do not validate the frame, nor do they check to see if they are
being requested to relay the frame.

Repeaters have several advantages over digipeaters, and a few disadvantages.
Because the digipeater has to receive the entire frame before it starts to
retransmit it, it takes 2X+ the channel time of an unrelayed frame. A repeater,
because it repeats in realtime, doesn't slow down the frame relay except for
some initial keyup delay at the start of activity. Thus a digipeater cuts
the effective throughput of a channel in half while a repeater does not.
A repeater offers another more important advantage. It allows every station
to hear every other station. This is because all stations transmit on
the repeater input and listen on the repeater output. Everything the
repeater hears, every station hears. This eliminates a problem called
the hidden terminal problem which is the bane of simplex digipeater
operation.

Because digipeaters and repeaters are sited at preferred locations, often
the highest spot around, they hear every transmission made in the area.
Because user stations generally aren't in such preferred locations, they
generally don't hear most of the other stations on channel. This can result
in collisions because several user stations may key up on top of each other
because they can't hear each other. But the digipeater can, and what it
receives is then just a scrambled mess. So it won't retransmit *any* of
the frames being sent. Since packet is an ARQ protocol, all the user stations
will continue to try to send their frame, and will continue to collide and
little channel throughput will occur. This problem is greatly reduced by
a repeater. Since every station monitors the repeater output, they hear
every other station on the network. So if another station is transmitting,
they will refrain from transmitting until the other station finishes it's
transmission. This solves the hidden terminal problem and greatly increases
the channel's effective capacity.

Now I mentioned that repeaters have some disadvantages. The first should
be obvious, two frequencies are used instead of one. This is offset by
the higher utilization the repeater offers. The second disadvantage of
the repeater is that if it fails, all stations on the network are out
of service even if they were in simplex range of each other. This is
because they aren't listening on the frequency on which they are transmitting.
An operator must intervene and change the frequencies of the radios to
maintain partial network operation in case of repeater failure. Repeater
owners usually go to great pains to maintain reliable service so this
usually isn't a serious concern.

Gary
--
Gary Coffman KE4ZV |"If 10% is good enough | gatech!wa4mei!ke4zv!gary

Destructive Testing Systems | for Jesus, it's good | uunet!rsiatl!ke4zv!gary
534 Shannon Way | enough for Uncle Sam."| emory!kd4nc!ke4zv!gary
Lawrenceville, GA 30244 | -Ray Stevens |

Date: 14 Sep 1993 03:04:49 -0400
From: news.cerf.net!crash!newshub.nosc.mil!dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!noc.near.net!news.delphi.com!news.delphi.com!not-for-mail@network.ucsd.edu
Subject: Kansas City TCP/IP?
To: ham-digital@ucsd.edu

I am in Leavenworth County (30 mi NW of KC) and would
like to get the frequencies for the area TCP/IP
LAN. If you can help, please send EMAIL. Thanks.

73, Mark. aa2ma.
--
Internet: mmorgida@delphi.com

Date: 14 Sep 1993 02:17:58 GMT
From: pa.dec.com!sousa.ako.dec.com!bobseg.enet.dec.com!segrest@decwrl.dec.com
Subject: Looking for a source of NOSintro in the US
To: ham-digital@ucsd.edu

I understand that the NOSintro book is now available from the ARRL. Can
anyone tell how to contact the ARRL library to get the specifics?

--
Bob Segrest
segrest@bobseg.enet.dec.com

Date: Sun, 12 Sep 1993 02:06:51 GMT
From: news.cerf.net!crash!newshub.nosc.mil!dog.ee.lbl.gov!overload.lbl.gov!agate!howland.reston.ans.net!sol.ctr.columbia.edu!destroyer!nntp.cs.ubc.ca!alberta!nebulus!ve6mgs!usenet@network.ucsd
Subject: SCDX 2184
To: ham-digital@ucsd.edu

Because SCDX 2184 was not put out on the net... this is being sent.
Please note that this is an "old" post and not a new issue! I cannot
seem to find 2185 at the moment... but I'll continue to look.

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::::::::::::::::::::::::::::::::::
::           MediaScan            ::
::      SWEDEN CALLING DXERS      ::
::       from Radio Sweden        ::
::   Number 2184--August 3, 1993  ::
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Satellite, shortwave and other electronic media news from Radio Sweden.

This week's bulletin was written by George Wood.

Packet Radio BID SCDX2184

All times UTC unless otherwise noted.

NORDIC MEDIA NEWS:

TV 5 NORDIC--Satellite broadcasting has become profitable here in Scandinavia. All three Swedish commercial satellite broadcasters, TV3, TV4, and TV5 Nordic, are now showing profits. For TV5, this is a considerable change. Just two years ago the former owner had to sell three-quarters of the channel to a Luxembourg-based American company.

We called TV5 Nordic's Managing Director, Hans von Schreeb. What have you done to turn things around?

HANS VON SCHREEB: Mainly knowledge. During at least the latter part of the 80's you could raise money in Sweden for ventures such as TV. But there was no previous knowledge of commercial television. So through a new major ownership we have gained knowledge in the sense that we have the U.S. experience and also experience from Denmark and Norway. That's the experience that we are now taking advantage of.

RADIO SWEDEN: It seems like you're always the little brother of Swedish broadcasters. The newspapers and magazines usually put you on a separate page from the other 4 channels, or they put you into a little box with the foreign channels. Does that hurt?

HVS: Well, it hurts mentally, in the sense that fro the beginning we were not even in the papers. While our competitors, for example TV4, was in the papers even before they began broadcasting. Now in our case, we are getting our decent share, even in the papers. So, I think that
within the forthcoming months you will see the necessary changes. But already now we have an average of about 60 or 70 percent of the viewers that TV3 has, and this means that we should be in the papers in the same way as our

competitors. I think you will see that change.

RS: So they're taking you more seriously now?

HVS: Well, yess. We have at least, on the average, between 500,000 and 700,000 viewers who watch us every night, and they should have a proper chance to gt decent information.

RS: The American company that owns you also owns Norway's TV Norge and Denmark's TV2. Has this helped you--are you co-ordinating any programming or anything like that?

HVS: We will. It also helps us with experience, what kind of format works, how can you make local productions in a Scandinavian environment, how can you cut costs, etc. This also gives us an opportunity to choose computer systems that are already used in Denmark and Norway. Yes this helps.

RS: You've had a fight with France's TV5 over the very name itself. Have you finally resolved that problem?

HVS: The Swedish Supreme Court has ruled that we have the right to use the name TV5 Nordic until the case is finally resolved. Hopefully it will be resolved, and I would really like to settle outside of court, because I don't think we gain anything from this fight. The name TV5 is used in various places in Europe. We're also two very different stations, in two different languages. One is a government-owned public service channel, the other is an internationally-owned commercial TV service. I don't think we have hurt the French in any deep way. So I don't think this fight is especially rational.

RS: What about future plans? You have a lot of American programming, is that going to continue?

HVS: Well yes, it will continue at the same level as long as our viewers like it. I think the main thing is to get more local production, to give a Swedish flavor to it. And that's what we're aiming for now. We've gone through our graphic program, which is totally different from TV3 and TV4, and you'll also see local production that's different.

RS: One thing that you don't have is news.

HVS: We will have news in one form or another. Our news will give an opportunity for our viewers to be informed while watching TV5 Nordic during the evening. So it will be short news stories. You'll see that rather soon.

EUROPEAN MEDIA NEWS:

ASTRA--Right on time on July 22nd, Discovery and its companion, the oldies TV

and film channel Bravo, showed up on the new Astra 1C satellite.

Discovery is on Astra transponder 41, Bravo on 42. Both are soft-scrambling in videocrypt, which means anyone with a decoder can watch, without a smart card. That's just as well, since the cards for the Sky Multi-Channel package, which is to include Discovery and Bravo, go into effect on September 1st.

BSkyB has extended the discount offer for its Multi-Channels package until August 31st, the date before the new package goes into effect. This could indicate that they haven't received as many subscriptions as they had hoped. On the other hand, BSkyB may have intended to have August 31st as the final date the entire time, and the original July 31st target may have been a marketing ploy to encourage early subscriptions.

When the Children's Channel signs off transponder 35, there's now a sign from Astra saying the Family Channel will be using that transponder, which confirms our report of two weeks ago.

On August 1st Bravo switched to a new schedule between noon and midnight British time, so there's room for the Adult Channel to make its reported move from transponder 26. But that hasn't happened yet.

There's also some very interesting speculation in "Sky Guide". Right now TV Asia is using the Nickolodeon transponder, number 46, between 18:00 and 06:00 hrs UTC. But they'll have to move when the Nick at Nite service starts there. When the Adult Channel moves from transponder 26, and British Sky Broadcasting starts its multi-channel package, BSkyB might also close Sky Movies Gold on that transponder. That would allow TV Asia to expand its operation on transponder 26 to 24 hours a day. ("Sky Guide")

Otherwise, the big news from Astra is that the company has now decided to launch a sixth satellite, Astra 1F, scheduled to go into orbit in 1996. Like Astra 1E, due for launch in early 1995, 1F will be dedicated to digital radio and television. 1E will operate in the 11.7 to 12.1 GHz range, while 1F will cover between 12.1 and 12.5 GHz. (SES)

VIRGIN--Virgin 1215 made its return to Astra July 23rd at 09:00 hrs UTC. They're using 7.38 and 7.56 MHz on the Sky News transponder. So far both channels are mono, but the service will be stereo soon. The country music station QCMR, which had been on one of those channels, has moved to the Sky Sports transponder, 7.38 MHz. (James Robinson)

WORLD RADIO NETWORK--The long-awaited relay from the World Radio Network of National Public Radio from the United States began on July 20th. "Morning Edition" is being carried for an hour at 13:00 hrs UTC, and there's two hours of "All Things Considered" at 21:30 hrs. But the service is not on Astra. They're using the World Radio Network's Eutelsat II-F1 outlet, on the MBC transponder, 11.554 GHz, audio 7.74 MHz. We called up Karl Miosga at the

World Radio Network and asked why?

KARL MIOSGA: We're using this as a test transmission, a temporary service, to check out the circuit from Washington to London and iron out any little bugs that we may have. But also for prospecgive radio stations and cable companies who might be interested in relaying live programs from NPR.

RADIO SWEDEN: So when will you be going to Astra?

KM: We're aiming to start our Astra service in September, with test transmissions beginning one or two weeks before, middle of August say. At the moment, Astra 1C looks very likely as to where our home would be, but at this point we can't make a definative announcement.

RS: Right now the NPR programming is sharing your channel with your regular programming from Vatican Radio in many languages and Radio Canada International in Russian. When you move to Astra, it will be a completely new channel. Are you lining up other English language broadcasters as well?

KM: Yes. It will be a mixed bag again, but all in English, of course. And mostly live. We'll have a couple of surprises, I can't give you any exact details at this point, but it will be very similar to the tests we did last year.

RS: Right now you have the two programs from NPR, "Morning Edition" and "All Things Considered". Are you planning on having other programs from National Public Radio as well?

KM: That is correct. We'll be taking "Talk of the Nation", which is their live telephone radio show, which happens in the evening our time. And it will also be possible for anyone across Europe to take part in that. But that will be one of the extra programs that will feature in the Astra line-up.

ARIANE--Ariane has had another launch after Astra 1C. On July 22nd the Western European rocket put satellites for Spain and India into orbit.

Spain's Hispasat 1B is the follow-up to Hispasat 1A, and will be placed alongside it at 30 degrees West. It should be in place in about 10 days, and will begin official operation in October. Hispasat transmits to both Spain and Latin America, with both Ku-band DBS and Fixed Satellite Service transponders. But there have been problems with the 1A satellite. 1B should make a big difference.

The other satellite just launched into orbit is India's Insat 2B. It's India's second indigenously-built satellite, and will be placed at 93.5 degrees East. It's expected to be declared operational by early September. It will complement Insat 2A, which is at 74 degrees East. (Reuters, "World

Satellite Almanac")

India's state-owned television is to launch four satellite-based channels on August 15th, India's Independence Day, to win back audience from foreign networks. The new channels will carry sports, entertainment, news, and music programming, apparently from Insat 2A. A fifth channel is to begin on Insat 2B. (BBC Monitoring)

ASIAN MEDIA NEWS:

SKY AND STAR--Europe's biggest satellite broadcaster has bought a controlling interest in Asia's biggest satellite broadcaster. Rupert Murdoch's News Corporation has purchased 63.6 percent of Hong Kong's Star Televison, which currently transmits 6 channels: news from BBC World Service Television, sports, general entertainment, and channels in Mandarin and Hindi.

News Corporation owns British Sky Broadcasting, which has 6 channels on Astra, and is behind the new Astra multi-channel package. News Corporation also owns Fox Television and 20th Century Films in the United States.

Less than a month ago Murdoch was thwarted in his effort to buy 22 percent of Hong Kong's TVB, which has a vast library of Chinese programming, in an effort to create a competitor to Star Television. That deal got stopped by the Hong Kong government, and TVB has since lined up with CNN, Home Box Office, ESPN, and the Australian Broadcasting Corporation. But they'll be broadcasting on Indonesia's Palapa B2P satellite, whose signal barely reaches the main Chinese-language markets of China, Hong Kong, and Taiwan.

Star, on the other hand, reaches 11 million homes from Japan to the Middle East on Asiasat-1. Asiasat-2, with more channels, is due to be launched next year. Star is expecting that BSkyB's expertise will help it launch several pay-TV channels in October. The deal follows an attempt by Pearson, owners of the "Financial Times" to buy control of Star-TV. Analysts have described the merger of Sky and Star as a marriage made in heaven. (AP, Reuters, "International Herald Tribune", "The Economist")

BUSINESS NEWS CHANNEL--Japan's Mitsui company has reached agreement with NBC in the United States and Pearson plc, owner of the "Financial Times", to launch a 24 hour financial and business satellite channel for Asia. Star-TV is also involved, so presumeably the new channel would broadcast from Asiasat-1. (Kyodo News Agency via BBC Monitoring)

SHORTWAVE:

ALBANIA--Radio Tirana is restructuring, cutting back from 23 languages, to first 12 and then 8 services. Radio Tirana is now broadcasting in English:

01:30-02:00 hrs and 02:30-02:45 hrs on 9580 and 11840 kHz; 14:30-15:00 hrs on 7155 and 9760 kHz; and 22:00-22:15 hrs on 1395; 9760, and 11815 kHz. (BBC Monitoring)

LIBERIA--The pro-Nigerian-ECOMOG Radio ELBC in Monrovia continues to broadcast on 7275 kHz, despite reports that it went off the air in May. The pro-Charles Taylor Radio ELBC based in Gbarnga also continues to broadcast. (BBC Monitoring)

LITHUANIA--Radiocentras, the private station in Lithuania, has been testing in slow-speed morse code on 9400 kHz. BBC Monitoring says they are announcing an output power of 5 kW, and it certainly has a strong signal here in Stockholm. The part we recorded was in English, and gave the address for reception reports.

SOMALIA--A new station broadcasting in Somali and calling itself Radio Mogadishu has been heard at 15:00 hrs on 6870 kHz. This station supports General Mohammed Farah Aydid and opposes the United Nations presence in Somalia. It uses the same signature tune as used by Ali Mahdi Muhammad's Radio Mogadishu, which has been heard on 6863 and 6866 kHz. (BBC Monitoring)

UNOFFICIAL RADIO--The Voice of Independent Kurdistan, which supports the Kurdish Workers Party, the PKK, has been heard at 14:00 hrs on 7330 kHz. It was last heard in March on 7030 kHz. (BBC Monitoring) The PKK is fighting for a Turkish homeland in Turkey, and has recently attacked tourist targets in Turkey.

Sweden Calling DXers is the world's oldest radio program for shortwave listeners. Radio Sweden has presented this round-up of radio news, features, and interviews on Tuesdays since 1948.

Radio Sweden broadcasts in English:

Europe and Africa:

15:00 hrs on 1179 khz (weekdays only)
16:15 hrs on 1179 and 6065 kHz
17:30 hrs on 1179, 6065, and 9645 kHz
20:30 hrs on 1179, 6065 and 9655 kHz
21:30 hrs on 1179 and 6065 khz, and
22:30 hrs on 1179 and 6065 kHz

Middle East and East Africa:

15:00 hrs on 15190 kHz and
17:30 hrs on 15270 kHz

Asia and the Pacific:

   12:30 hrs on 15240 and 21500 kHz
   22:30 hrs on 11910 kHz and
   01:00 hrs on 9695 and 11820 kHz

North America:

   15:00 hrs on 15240 and 21500 kHz and
   02:00 hrs on 9695 and 11705 kHz

South America:

   00:00 hrs on 9695 kHz

The broadcasts at 12:30, 16:15, 17:30, 20:30 (weekends only), 21:30, and 22:30 hrs are also relayed to Europe by satellite:

   Astra 1B (19.2 degrees East) transponder 26 (Sky Movies Gold/TV Asia/Adult Channel) at 11.597 GHz, audio subcarrier at 7.74 MHz,

   Tele-X (5 degrees East) (TV4 transponder) at 12.207 GHz, audio subcarrier 7.38 MHz.

Contributions can be sent to DX Editor George Wood by fax to +1-707-468-1460 (beginning August 13), from Internet to 70247.3516@compuserve.com, or from MCI Mail or CompuServe to the CompuServe mailbox 70247,3516.

Reports can also be sent to:

      Radio Sweden
      S-105 10 Stockholm
      Sweden

Contributions should be NEWS about electronic media--from shortwave to satellites--and not loggings of information already available from sources such as the "World Radio TV Handbook". Clubs and DX publications may reprint material as long as MediaScan/Sweden Calling DXers and the original contributor are acknowledged, with the exception of items from BBC Monitoring, which are copyright.

We welcome comments and suggestions about the electronic edition, Sweden Calling DXers, and our programs in general.

Thanks to this week's contributors Good Listening!

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End of Ham-Digital Digest V93 #39
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